



What should I know about second-year Algebra courses in first year?

There are four 200-level algebra courses at UTM: MAT223H5, MAT224H5, MAT240H5 and MAT247H5. If you are planning on pursuing the Mathematical Sciences Specialist program, we recommend completing MAT102H5 in the Fall term of your first year, and then MAT240H5 in the Winter term.

Course Code	Explanation
MAT223H5	An introduction to Linear Algebra, with an emphasis on computations and conceptual understanding. MAT223H5 is a prerequisite for many other courses and a requirement for some programs, so for those reasons, it is often taken in first year, despite the 200-level course code. Note that there are no prerequisites other than High School math for the course. That said, many students choose to wait until the Summer after their first year or during their second year to take a linear algebra course.
MAT224H5	A second course in Linear Algebra, with an emphasis on proofs and rigour. MAT224H5 builds off MAT223H5, but students will also see the theoretical foundations for much of the material from MAT223H5. Far fewer non-mathematics courses or programs require MAT224H5 compared to those that require MAT223H5. So MAT224H5 is typically taken by students interested in the Mathematical Sciences Minor or Major program, as a prerequisite for upper-year courses.
MAT240H5	A highly rigorous first course in Linear Algebra great for students with a serious interest in mathematics (for instance those aiming at, or in the Mathematical Sciences Specialist or the Major program.) MAT240H5 covers much of the same material as MAT223H5 + MAT224H5 but at an accelerated pace and with greater abstraction, rigour and depth.
MAT247H5	A continuation of MAT240H5. It is intended primarily for students aiming at, or in the Mathematical Sciences Specialist program.

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